Docket No.: HO-P.03167US0

(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Kenji Sato et al.

Application No.: Not Yet Assigned

Confirmation No.: N/A

Filed: Concurrently

Art Unit: N/A

For:

Proteoglycan Isolated From Cartilaginous Fish

and Process for Producing the same

Examiner: Not Yet Assigned

INFORMATION DISCLOSURE STATEMENT (IDS)

MS PCT Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed concurrently with the filing of the U.S. filing National Phase Application.

A summary/abstract translation of the non-English language references is enclosed.

Applicant has not submitted copies of each cited U.S. patent and U.S. patent application as required by 37 CFR 1.98(a)(2)(i), amended October 2004, as the U.S. Patent and Trademark Office has waived this requirement for all U.S. patent applications. Applicant submits herewith copies of foreign and non-patents in accordance with 37 CFR 1.98(a)(2).

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other 25594574

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material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Information Disclosure statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 06-2375, under Order No. HO-P03167US0.

Dated: April 3, 2006

Respectfully submitted,

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PTO/SB/08A (10-01) Approved for use through 10/31/2002.OMB 0651-0031

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Sub	stitute for form 1449A/PTO)		Complete if Known		
				Application Number	Not Yet Assigned 4 1	
11	VEORMATION	N DI	SCLOSURE	Filing Date	Concurrently	
S	TATEMENT	BY	APPLICANT	First Named Inventor	Kenji Sato	
				Art Unit	N/A	
	(use as many sh	eets as	necessary)	Examiner Name	Not Yet Assigned	
Sheet	1	of	2	Attorney Docket Number	HO-P03167US0	

U.S. PATENT DOCUMENTS							
Examiner Cite Initials* No.1		Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
	AA	US-4,473,551	09-25-1984	Schinitsky			
	AB	US-6,379,709	04-30-2002	Slim et al.			

FOREIGN PATENT DOCUMENTS								
Examiner	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where Relevant			
Initials*		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	MM-DD-YYYY	Applicant of Cited Document	Passages or Relevant Figures Appear	T⁵		
	BA	JP-9-512563	12-16-1997	Dupont et al.		П		
	BB	JP-2001-48795	02-20-2001	Yagita				
	ВС	JP-2003-246742	02-09-2003	Dupont et al.				
	BD	JP-2003-300858	10-21-2003	Osumi et al.		П		
	BE	WO-95/32722	12-07-1995	Dupont et al.		П		
	BF	WO-96/23512	08-08-1996	Dupont et al.				
	BG	WO-03/068249	08-21-2003	Kralovec et al.				

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant

¹ Applicant's unique citation designation number (optional). ² See attached Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the application number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

		NON PATENT LITERATURE DOCUMENTS				
Examiner Initials	Cite No.1 Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issue number(s), publisher, city and/or country where published.					
	CA	Davis et al., "Inhibitiion of Angiogenesis by Oral Ingestion of Powdered Shark Cartilage in a Rat Model," <i>Microvascular Research</i> , 54: 178-182, 1997.				
	СВ	Ernst, "Shark cartilage for cancer?" The Lancet, 351: 298, 1998.				
	СС	Folkman, "Angiogenesis in cancer, vascular, rheumatoid and other disease," <i>Nature Medicine</i> , 1: 27-31, 1995.				
	CD	Gingras et al., "Shark cartilage extracts as antiangiogenic agents: smart drinks or bitter pills?" Cancer and Metastasis Reviews, 19: 83-86, 2000.				
	CE	lki et al., "Expression of matrix metalloproteinase 2 (MMP-2), membrane-type 1 MMP and tissue inhibitor of metalloproteinase 2 and activation of proMMP-2 in pancreatic duct adenocarcinomas in hamsters treated with <i>N</i> -nitrosobis(2-oxopropyl)amine," <i>Carcinogenesis</i> , 20(7): 1323-1329, 1999.				
	CF	Kitahashi et al., "Changes in Serum Matrix Metalloproteinase(MMPs) and Serine Protease Levels and Inhibition of Their Activity in Hamsters Fed with Shark Cartilage Extracts," Annual Meeting of Japan Society Bioscience, Biotechnology, and Agrochemistry, 2003 (abstract in English).				
	CG	Lee et al., "Shark Cartilage Contains Inhibitors of Tumor Angiogenesis," <i>Science</i> , 221: 1185-1187, 1983.				
	СН	Moses et al, "A Metalloproteinase Inhibitor as an Inhibitor of Neovascularization," <i>J. Cell. Biochem.</i> , 47: 230-235, 1991.				
	CI	Murata, "Effects of Bovine and Shark Cartilage Water Extracts on Pancreatic Ductal Carcinogenesis in Hamsters," Journal of Nara Medical Association, 53(5-6): 241-252, 2002 (with English translation).				

Examiner	Date	
Signature	Considered	

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Sub	stitute for form 1449A/P	то		Complete if Known		
				Application Number	Not Yet Assigned, OO	
11	NFORMATIC	ON DIS	CLOSURE	Filing Date	officurrently 4	
S	TATEMENT	BY A	PPLICANT	First Named Inventor	Kenji Sato	
				Art Unit	N/A	
	(use as many sheets as necessary)			Examiner Name	Not Yet Assigned	
Sheet	2	of	2	Attorney Docket Number	HO-P03167US0	

	CJ	Naito et al., "Inhibition of Growth of Human Tumor Cells in Nude Mice by a Metalloproteinase	
<u></u>		Inhibitor," Int. J. Cancer, 58: 730-735, 1994.	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Examiner Date	
Signature Considere	ed

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